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NRO and USAF review(s)
completed.

Copy 6 of 6

1 November 1963

MEMORANDUM FOR THE RECORD

SUBJECT: Conversation with [] Lockheed Aircraft Corporation (LAC), 25 October 1963

1. The undersigned briefed [] (LAC) on the anti-radar (AR) materials and techniques information accumulated during two trips; one to Naval Research Laboratories, Washington, D.C., and the other to Air Force Systems Command, WPAFB, Ohio.

2. [] stated that these informations were not new to him nor to LAC. The undersigned believes that the foregoing statement is plausible, in view of the strong limitations imposed upon AR by the lack of suitable materials.

3. [] expressed an interest in the corrosion of AR materials and titanium in the environment at altitude when subjected to electron bombardment at the time the undersigned visited him several months ago at LAC. The undersigned believes that this is an item of proper concern to all of us and briefed [] on the desirability of testing this corrosion in the environmental chamber now being built at []

4. The undersigned will explore, at once, the ways with which [] people can carry out this work at the earliest possible moment without interference with the primary purpose for which the chamber is being built.

5. [] expressed concern over the vulnerability of the "O" vehicle to lightning discharges because all-weather flights are soon upcoming. This is in line with

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the concern of the undersigned over the problem of neutralization of the "O" vehicle in connection with the operation of KEMPSTER. The undersigned made several important bibliographic references on lightning and electric charge neutralization available to [] during his visit here.

6. The undersigned will explore the potential of [] on his visit there 29-30 October 1963 to perform lightning vulnerability tests on scale sections of the rudder coated with AR material. The plan of attack on this problem will be:

a. equipotential high-voltage profiles scale models in order to define more accurately the high field intensity regions and to explore possible neutralization of them.

b. Specific damage potential of lightning strikes on such full-scale structures as the rudder covered with AR material and exploration of how possible damage can be prevented.

c. Assessment of possible hazards by charge build-up on the "O" vehicle inherent in the operation of KEMPSTER. Seeking possible means of obviating possible hazards by charge neutralization.

7. Kelly Johnson gave [] approval to go ahead in this area when he was here last Friday, and has requested that he be informed directly when [] has assessed their potential relative to the lightning problem.

8. The undersigned understands that LAC would be entering into some contractual agreement with [] on the foregoing matter.

SIGNED

EAD/OSA [] Engineering and ANALYSIS Division
Cy 1 - EAD/OSA (thru ADD/SMT) OSA
2 - AD/OSA
3 - CD/OSA
4 - D/TECH/OSA
5 - EAD/OSA (chrono)
6 - RR/OSA

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